

Agilent Pilot Scale Purification System – Site Preparation Checklist

Thank you for purchasing an Agilent **instrument**. To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide AND checklist** prepared for you that outlines the supplies, consumables, space and utility requirements for your equipment for your site.

Customer Responsibilities

Make sure your site meets the following prior specifications before the installation date. For details, see specific sections within this checklist, including:

- q The necessary laboratory or bench space is available.
- q The environmental conditions for the lab as well as laboratory gases and plumbing.
- q The power requirements related to the product (e.g., number & location of electrical outlets).
- q The required operating supplies necessary for the product and installation.
- q Please consult Other Requirements section below for other product-specific information.

If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.

- q The necessary access to the customer provided workstation is available.
- q If networked, the necessary details have been reserved.

Important Customer Information

1. If you have questions or problems in providing anything described as a Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
2. Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
3. Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.

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Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below.

Pay special attention to the **total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves**. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special Notes

1. All instruments must be placed on a flat sturdy surface free of significant vibration.
2. Ensure the distance between the system and the walls of the facility is at least 10 cm (4 in) to provide adequate ventilation and allow ready access in the event that any adjustments are needed.
3. Approximately 90 deep x 140 wide cm total bench space is required per instrument. Avoid placing the instrument in locations with extreme temperature and humidity changes such as direct sunlight, near an open window, or beneath an air conditioning vent.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
Agilent SD-1 SDM	34.0	75.0	26.7	10.5	56.0	22.0	40.6	16.0
Agilent SD-2 SDM	27.2	60.0	19.7	7.75	51.6	20.3	29.2	11.5
Agilent 218 SDM	23.6	52.0	19.7	7.75	46.4	18.3	29.2	11.5
Agilent 325 UV/Vis Detector	15.5	34.0	21.2	8.3	47.5	18.7	29.6	11.7
Agilent 530 Fraction Collector	11.3	25.0	20.3	8.0	55.9	22.0	29.6	11.7
Agilent 530 OPTO IB	11.3	25.0	20.3	8.0	55.9	22.0	29.6	11.7



Environmental Conditions

Operating your instrument within the recommended temperature ranges insures optimum system performance and lifetime.

Special Notes

1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
2. The site's ambient temperature conditions must be stable for optimum performance.
3. A minimum of 80 psi of dry filtered compressed air or nitrogen is required.
4. The area selected for operation must be free from drafts, corrosive atmospheres and vibration.

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- Limit dust levels to less than 36 000 000 particles (0.5 microns or larger) per cubic meter of air.
(This is equivalent to a clean office)

Instrument Description	Operating temp range °C (F)	Operating humidity range (%)	Heat Dissipation (BTU)
Agilent SD-1 SDM	4-40 (39-104)	20-80	N/A
Agilent SD-2 SDM	15-30 (59-86)	20-80	N/A
Agilent 218 SDM	3-40 (41-104)	20-80	N/A
Agilent 325 UV/Vis Detector	10-35 (50-95)	5-95	N/A
Agilent 530 Fraction Collector	15-30 (59-86)	20-80	N/A
Agilent 530 OPTO IB	15-30 (59-86)	20-80	N/A



Power Consumption

Special Notes

- If a computer system is supplied with your system, be sure to account for those electrical outlets.
- Avoid using power supplies from a source that may be subject to electrical interference from other services (such as large electric motors, elevators, welders and air conditioning units).
- Only single phase power is required.

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Maximum Power Consumption (W)
Agilent SD1 SDM	100-240 V AC, 50-60 Hz	1000 VA	N/A
Agilent SD2 SDM	100-240 V AC, 50-60 Hz	600 VA	N/A
Agilent 218 SDM	100-240 V AC, 50-60 Hz	550 VA	N/A
Agilent 325 UV/Vis Detector	100-240 V AC, 50-60 Hz	130 VA	N/A
Agilent 530 Fraction Collector	100-240 V AC, 50-60 Hz	100 VA	N/A
Agilent 530 OPTO IB	100-240 V AC, 50-60 Hz	250 VA	N/A

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Required Operating Supplies by Customer

Please refer to individual test sections for more information on the quantity and / or concentration of the materials required for the successful completion of the IQ, OQ.

Special Notes

- For information on Agilent consumables, accessories and laboratory operating supplies, please visit <http://www.chem.agilent.com/en-US/Products/consumables/Pages/default.aspx>

Item Description (including dimensions etc)	Vendor's Part Number (if applicable)	Recommended Quantity
Graduated cylinder, 1000 mL	"any"	1
Graduated cylinder, 500 mL	"any"	1
Graduated cylinder, 100 mL	"any"	1
Timer or Stopwatch	"any"	1
HPLC grade water	"any"	10L
Acetone 2.4% (HPLC grade)	"any"	100mL
Acetone 0.5% (HPLC grade)	"any"	1, 4 or 10L

If there are any special site requirements for the validation prior to performing this validation, record the information below.

Special Site requirement	☐ None

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Other Requirements

Wiring Requirements

The Pumps, Sampler and Fraction Collector are controlled via RS232/RS422, and must be installed close to the controlling PC. The length of the flat ribbon RS 232 cable is about 1.5 m.

Waste Requirements

Operation of the Agilent Pilot Scale Purification System requires the use of a waste container for the disposal of excess fluids. Suitable tubing is supplied with the HPLC system for use with most solvents. A chemically inert container, which is appropriately sized to hold waste coming from the system must be provided by the system user. It should be located underneath the workbench where it is protected by the bench and in full view of the operator.

Network Requirements

The Agilent 325 UV/vis Dual WL detector requires an Ethernet connection to the PC via a shielded twisted pair Ethernet crossover cable Category 5 or better (provided with the detector).

If connection is required to an Ethernet network, then a shielded twisted pair Ethernet non-crossover cable Category 5 or better will be required (not supplied).

Most PC's come pre-configured with an Ethernet connection either built into the motherboard or with an Ethernet network card installed. Check that the intended PC has this configuration and if not, a network card will have to be fitted. Refer to the installation chapter for details.

If the user is supplying their own PC, then they are responsible for installing and configuring the card. They are also responsible for setting up and maintaining any LAN configuration where a detector may be used.

All network issues are to be dealt with by the users.

Important Customer Web Links

- q For additional information about our solutions, please visit our web site at <http://www.chem.agilent.com/en-US/Pages/HomePage.aspx>
- q Need to get information on your product?
Literature Library - <http://www.agilent.com/chem/library>
- q Need to know more?
Customer Education – <http://www.agilent.com/chem/education>
- q Need technical support, FAQs? – <http://www.agilent.com/chem/techsupp>
- q Need supplies? – <http://www.agilent.com/chem/supplies>